

CLAIMS - YA0002

What is claimed is:

1. An integrated circuit structure, comprising:

a plurality of transistors;

a plurality of thin-film conductor interconnects, interconnected to  
form electronic circuits in a predetermined electrical con-  
figuration;

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a plurality of pairs of contact pads, connected to said thin-film  
conductor interconnects, each adjacent pair of contact pads  
including a first pad of a first conductive material and a  
second pad of a second conductive material, and being  
electrically connected only by a conductive oligomer of a  
precisely predetermined number of units.

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2. A process for manufacturing integrated circuits, comprising the steps of:
- a.) providing a substrate;
  - b.) forming a plurality of transistors on said substrate;
  - 5 c.) forming conductive interconnects on said substrate to interconnect said transistors in a predetermined electrical configuration;
  - d.) forming, among said interconnects, pairs of conductive contact pads; and
  - 10 e.) automatically forming polymeric conductors to electrically connect respective pairs of conductive contact pads in a self-aligned step.
3. The process of Claim 2, wherein said pairs include a first metal and a second metal, and said polymeric conductors attach asymmetrically with a first terminus attached to said first metal and a second terminus attached to said second metal.
4. The process of Claim 2, wherein said polymeric conductors each consist of an oligomer of a precisely predetermined number of units.

5. The process of Claim 2, wherein said polymeric conductors each consist of an oligomer of a precisely predetermined number of units, and wherein a first step forms a first set of oligomers having a first predetermined length, and a second step forms a second set of oligomers having a second predetermined length.